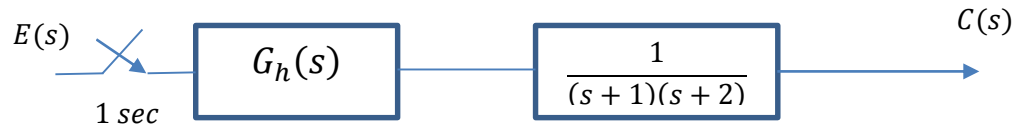


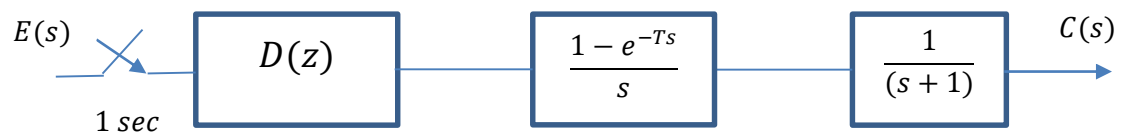
Tanta University	3 rd year, Computers & Control Dept.
Faculty of Engineering	Digital Control

Sheet 2

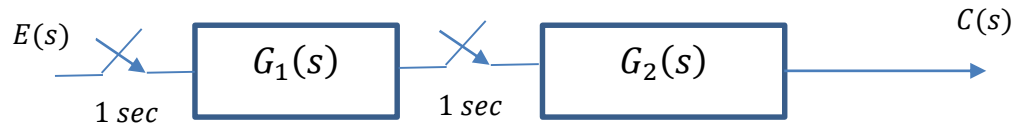
1. Find the transfer function $\frac{C(z)}{E(z)}$:



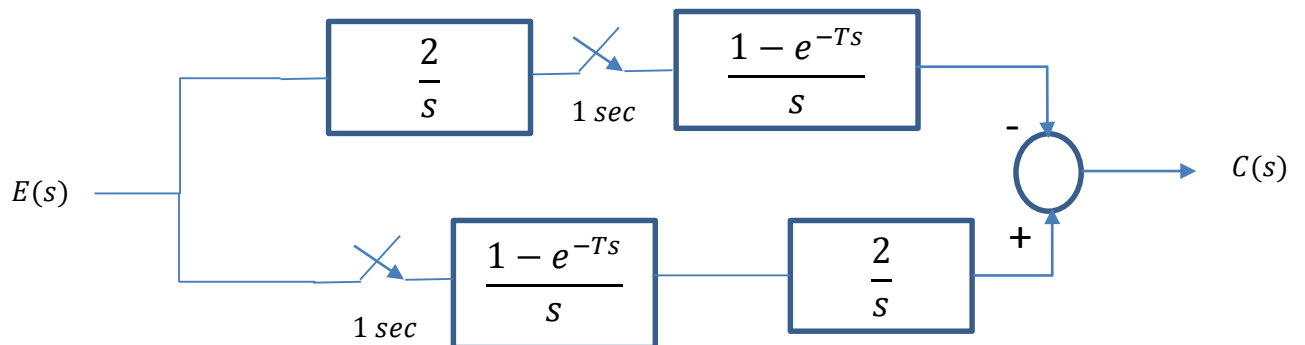
2. If $D(z) = \frac{z}{z-1}$, find the pulse Transfer Function.



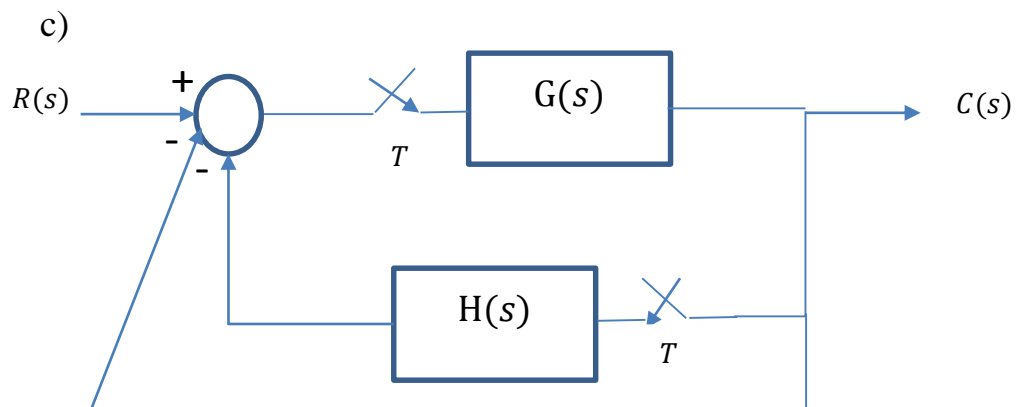
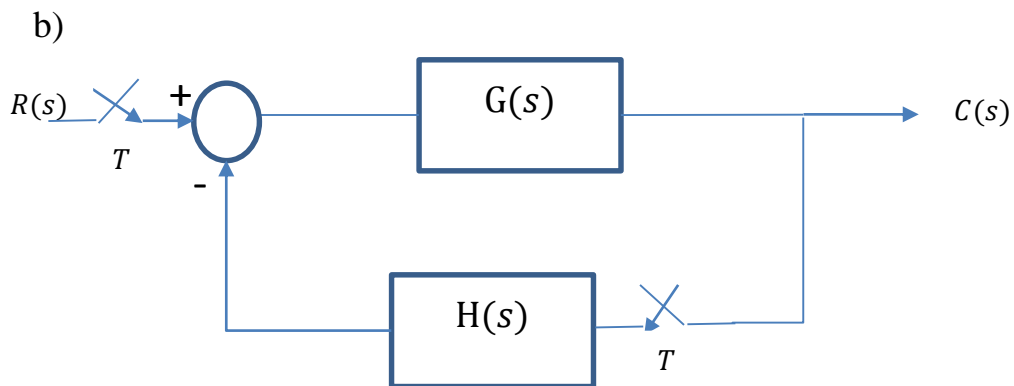
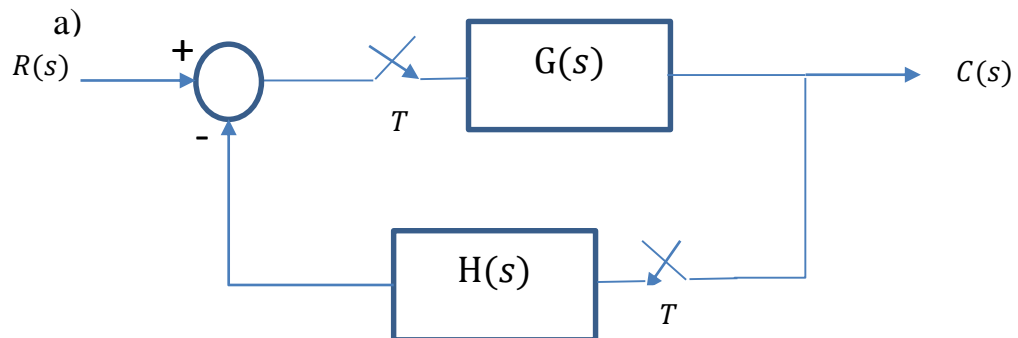
3. If $G_1(s) = G_2(s) = \frac{1-e^{-Ts}}{s(s+1)}$, find the Transfer Function $\frac{C(z)}{E(z)}$.



4. Find the output $c(k)$, for $e(t)$ is a unit step.

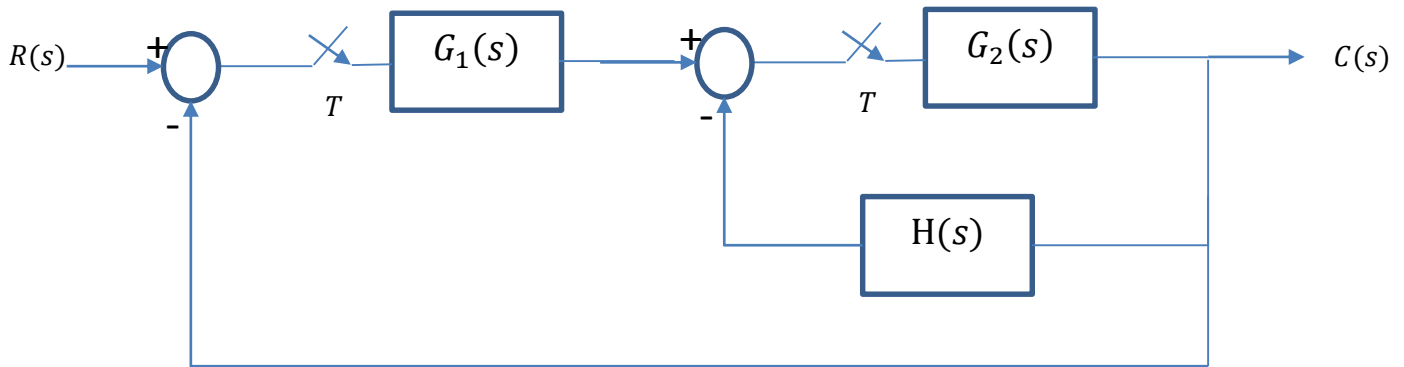


5. Find the system output $c(z)$ for the following systems:

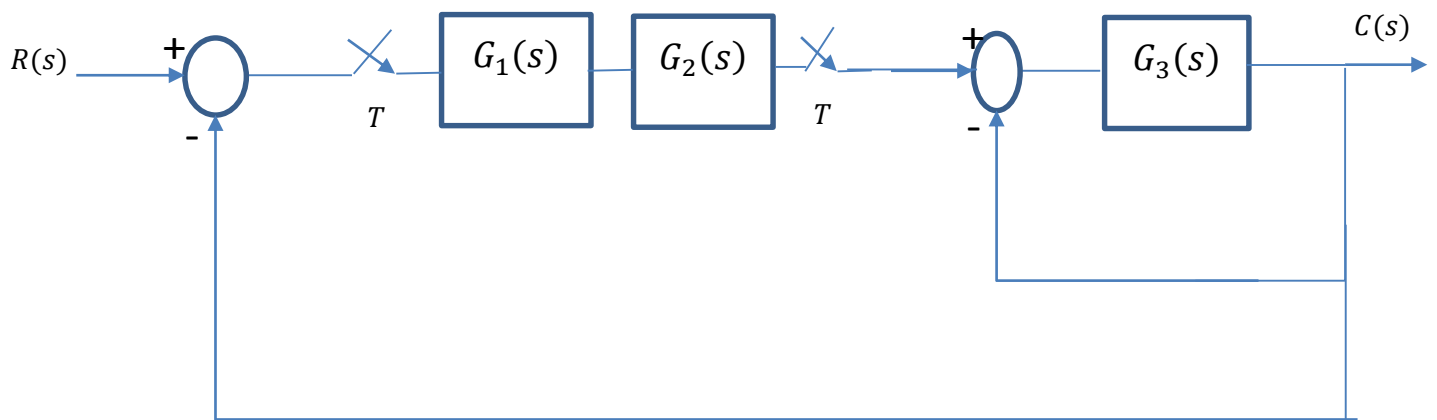


6. Find the overall T.F = $\frac{C(z)}{R(z)}$ for the systems shown:

a)



b)



c)

